UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,156	01/26/2001	David A. Maltz	10767/9	6214

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EXAMINER
LEE, PHILIP C

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**	
Office Action Summary	09/771,156	MALTZ ET AL.	
	Examiner	**Art Unit**	
	Philip C Lee	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*17 November 2003*</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-51*</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-51*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4</u>.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-51 are presented for examination.

2.   It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

3.   Claims 2-25 and 28-50 are objected to because of the following informalities: As per claims 2-25, line 1, "The invention" [i.e. the preamble must be "The method"]. As per claim 28-50, line 1, "The invention" [i.e. "The system"]. Appropriate correction is required.

Claim Rejections – 35 USC 112

4.   Claims 3-8, 15-16, 23, 28-33, 40-41 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedent basis:

    i. the first-mentioned network element – claims 3-5 and 28-30.

    ii. the first-mentioned instruction – claim 6-8 and 31-33.

    iii. the determining and rearranging acts – claims 7-8 and 32-33.

b. Claim language in the following claims is not clearly understood:

    i. As per claims 3-5, line 1, it is unclear if "the first-mention network element" refers to the network element in claim 1, line 1 or the at least one additional network element in claim 2, line 2.

    ii. As per claims 6-8, it is uncertain if "the first-mentioned instruction" refers to the instruction in claim 1, line 3 or the at least one additional instruction in claim 2, lines 1-2.

    iii. As per claims 15 and 16, it is not clearly understood what is meant by RSVP or RSVP-TE [i.e. please expand on abbreviations].

    iv. As per claim 23, it is unclear what is meant by COPS [i.e. please expand on abbreviations].

    v. As per claims 28-30, they have the same problems or uncertainties as in claims 2-5.

    vi. As per claims 31-33, they have the same problems or uncertainties as in claims 6-8.

    vii. As per claims 40-41, they have the same problems or uncertainties as in claims 15 and 16.

    viii. As per claim 48, they have the same problem or uncertainty as in claim 23.

Claim Rejections – 35 USC 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6.   The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

7.   Claims 1-5, 26-30 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by

Banginwar, U.S. Patent 6,611,863 (hereinafter Banginwar).

8.   As per claims 1, 26 and 51, Banginwar taught the invention as claimed for configuring a

network element in a computer network (col. 3, lines 21-29), comprising:

receiving an instruction to configure a network element in a computer network (col. 3,

lines 21-22);

converting the instruction into a form understood by the network element (col. 3, lines

23-24); and

sending the converted instruction to the network element (col. 3, lines 24-26).

9.   As per claims 2 and 27, Banginwar taught the invention as claimed as in claims 1 and 26

above. Banginwar further taught comprising receiving at least one additional instruction to

configure at least one additional network element in the computer network, converting the at

least one additional instruction into a form understood by the at least one additional network

element, and sending the converted at least one of additional instruction to the at least one

additional network element (col. 3, lines 21-29; col. 6, lines 47-51).

10.   As per claims 3 and 28, Banginwar taught the invention as claimed in claims 2 and 27

above. Banginwar further taught wherein the first-mentioned network element and the at least

one additional network element are same type devices from different vendors (col. 3, lines 4-17,

47-67).

11.   As per claims 4 and 29, Banginwar taught the invention as claimed in claims 2 and 27

above. Banginwar further taught wherein the first-mentioned network element and the at least

one additional network element are different type devices form different vendors (col. 3, lines 4-

17, 47-67).

12.   As per claims 5 and 30, Banginwar taught the invention as claimed in claims 2 and 27

above. Banginwar further taught wherein the first-mentioned network element and the at least

one additional network element are different type devices from same vendors (col. 3, lines 4-17,

47-67).

Claim Rejections – 35 USC 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

14.   Claims 6-8 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Banginwar in view of Vacante et al, U.S. Patent 6,651,191 (hereinafter Vacante).

15.   As per claims 6 and 31, Banginwar taught the invention as claimed in claims 2 and 27

above. Banginwar did not teach arranging and determining instructions in the first order.

Vacante taught wherein the first-mentioned instruction and the at least one additional instruction

are arranged in a first order (col. 3, lines 66-col. 4, lines 4; col. 5, lines 16-19), and wherein the

invention further comprises:

> determining whether the first-mentioned instruction and the at least one additional
>
> instruction will result in an invalid network state of the computer network if implemented
>
> in the first order (col. 6, lines 58-60; col. 5, lines 19-col. 6, lines 9); and
>
> if the first-mentioned instruction and the at least one additional instruction will result in
>
> an invalid network state of the computer network if implemented in the first order,
>
> rearranging the first-mentioned instruction and the at least one additional instruction into
>
> an order that will not result in an invalid network state if implemented (col. 6, lines 60-
>
> 67).

16.   As per claims 7 and 32, Banginwar and Vacante taught the invention substantially as

claimed in claims 6 and 31 above. Vacante did not specifically teach determining and

rearranging the instructions before the instruction are converted. However, It would have been

obvious to one of ordinary skill in the art at the time the invention was made to perform the

determining and rearranging processes before the instruction are converted because by doing so

would increase the efficiency of Banginwar's and Vacante's systems by avoiding the instruction

conversion process if the device is compatible with generic configuration instruction.

17.   As per claims 8 and 33, Banginwar and Vacante taught the invention substantially as

claimed in claims 6 and 31 above. Vacante further taught wherein the determining and

rearranging acts are performed after the first-mentioned instruction and the at least one additional

instruction are converted (col. 5, lines 10-14, 21-24).

18.   Claims 9-12, 21, 23, 34-37, 46 and 48 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Banginwar in view of Heuer, U.S. Patent 6,205,121 (hereinafter Heuer).

19.   As per claims 9 and 34, Banginwar taught the invention as claimed in claims 1 and 26

above. Banginwar did not teach configuring the network element based on a traffic demand.

Heuer taught comprising generating the instruction to configure the network element based on a

traffic demand of the computer network (fig.3; col. 2, lines 45-55; col. 3, lines 50-56; col. 4, lines

12-14; col. 4, lines 66-col. 5, lines 16).

20.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Banginwar and Heuer because Heuer's method of

configuration based on traffic demand would increase the efficiency of Banginwar's system by

allowing optimized configuration of network element based on the demand of the network

traffic.

21.   As per claims 10 and 35, Banginwar and Heuer taught the invention substantially as

claimed in claims 9 and 34 above. Heuer further taught wherein the instruction to configure the

network element is generated based on a predicted traffic demand of the computer network

(fig.3; col. 2, lines 45-55; col. 3, lines 50-56; col. 4, lines 12-14; col. 4, lines 66-col. 5, lines 16; col. 5, lines 59-col. 6, lines 4).

22.   As per claims 11 and 36, Banginwar and Heuer taught the invention substantially as claimed in claims 9 and 34 above. Heuer further taught wherein the traffic demand is determined at least in part from traffic data from a plurality of network elements in the computer network (fig.3; col. 2, lines 45-55; col. 3, lines 50-56; col. 4, lines 12-14; col. 4, lines 66-col. 5, lines 16; col. 5, lines 59-col. 6,lines 4).

23.   As per claims 12 and 37, Banginwar and Heuer taught the invention substantially as claimed in claims 9 and 34 above. Heuer further taught wherein the traffic demand is determined at least in part from traffic data predicted from a plurality of network elements in the computer network (fig.3; col. 2, lines 45-55; col. 3, lines 50-56; col. 4, lines 12-14; col. 4, lines 66-col. 5, lines 16; col. 5, lines 59-col. 6, lines 4).

24.   As per claims 21 and 46, Banginwar and Heuer taught the invention substantially as claimed in claims 9 and 34 above. Banginwar further taught wherein the traffic demand is determined at least in part from a policy system (col. 2, lines 13-34).

25.   As per claims 23 and 48, Banginwar and Heuer taught the invention substantially as claimed in claims 21 and 46 above. Banginwar further taught wherein the policy system is implemented using COPS (col. 1, lines 29-34).

26.   Claims 13-14, 17-19, 22, 24, 38-39, 42-44, 47 and 49 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Banginwar and Heuer in view of Graves et al, U.S. Patent 6,741,572

(hereinafter Graves).

27.   As per claims 13 and 38, Banginwar and Heuer taught the invention substantially as

claimed in claims 9 and 34 above. Banginwar and Heuer did not teach the traffic demand

request. Graves taught wherein the traffic demand is determined at least in part from a request

(col. 1, lines 51-55; col. 2, lines 21-25; col. 12, lines 65-67).

28.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Banginwar, Heuer and Graves because Graves's method

of traffic demand request would increase the efficiency of Banginwar's and Heuer's systems by

allowing optimized configuration of network element based on the demand of network users.

29.   As per claims 14, 22, 39 and 47, Banginwar, Heuer and Graves taught the invention

substantially as claimed in claims 13, 21, 38 and 46 above. Graves further taught wherein the

request is expressed in terms of one or more of the following: bandwidth, latency, jitter, loss rate,

protection type, and burst size (col. 9, lines 38-42).

30.   As per claims 17 and 42, Banginwar, Heuer and Graves taught the invention substantially

as claimed in claims 13 and 38 above. Graves further taught wherein the request is expressed

using a user-to-network interface (col. 9, lines 35-38).

31.   As per claims 18 and 43, Banginwar, Heuer and Graves taught the invention substantially

as claimed in claims 13 and 38 above. Graves further taught wherein the request expresses a

service level agreement (col. 5, lines 32-34).

32.   As per claims 19, 24, 44 and 49, Banginwar, Heuer and Graves taught the invention

substantially as claimed in claims 18, 21, 43 and 46 above. Graves further taught wherein the

request expresses a service level agreement that allows a customer to reserve a private path (col.

3, lines 16-29).

33.   Claims 15-16 and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Banginwar, Heuer and Graves in view of "Official Notice".

34.   As per claims 15-16 and 40-41, Banginwar, Heuer and Graves taught the invention

substantially as claimed in claims 13 and 38 above. Banginwar, Heuer and Graves did not teach

RSVP. "Official Notice" is taken for the concept of RSVP is known and accepted in the art. It

would have been obvious to one of ordinary skill in the art at the time the invention was made to

use RSVP because by doing so would increase the reliability of system by ensuring the

availability of resources for network transmission based on user's demand.

35.   Claims 20, 25, 45 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Banginwar, Heuer and Graves in view of Gordon et al, U.S. Patent 6,671,729 (hereinafter

Gordon).

36.   As per claims 20, 25, 45 and 50, Banginwar, Heuer and Graves taught the invention

substantially as claimed in claims 19, 21, 44 and 46 above. Banginwar, Heuer and Graves did

not specifically detailing the service level agreement. Gordon taught wherein the request

expresses a service level agreement that allows a customer to reserve a protection path in

addition to the private path (col. 1, lines 65-col. 2, lines 2; col. 5, lines 52-67).

37.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Banginwar, Heuer, Graves and Gordon because Gordon's

method of reserving a path would increase the security of Banginwar's, Heuer's and Graves's

systems by allowing allocation of resource based on the security level express in the service level

agreement.

CONCLUSION

38.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Fielding et al, U.S. Patent 6,181,696, disclosed a method of configuring different types of

devices from different manufacturers.

39.　A shortened statutory period for reply to this Office action is set to expire THREE

MONTHS from the mailing date of this action.

40.　Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Philip C Lee whose telephone number is (703)305-7721. The

examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other

Friday.

41.　If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the

organization where this application or proceeding is assigned is (703)872-9306.

42.　Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)350-6121.

P.L.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100